Section 4 Adolescent Preventive Health

A. INTRODUCTION

Adolescence is characterized by marked physical, emotional, and intellectual changes, as well as by changes in social roles, relationships and expectations. It is also a period of dynamic growth and presents the health care provider with many challenges and opportunities to identify, encourage and reinforce positive health protecting behaviors. The rapid growth and development in adolescence leads to changes in body proportions, size, weight and image, emotional changes, new sleep patterns and needs, developing sexuality and reproductive functioning, and influence from social/peer pressures. These changes represent a normal transition between childhood and adulthood, and adolescents experience these transitions in various ways. Primary care providers are required to offer comprehensive services according to the Healthy Kids Program's Maryland Schedule of Preventive Health Care. The annual preventive care visit is an excellent opportunity to identify potential and actual health problems and develop a plan to maintain good health.

The Health Resources and Services Administration (HRSA), in its *Bright Futures in Practice* guidelines for health supervision, defines the age range for adolescence as 11-21 years of age, subdivided into three stages: early (11-14 years); middle (15-17 years); and late (18-21 years) (Refer to Section 4 – Addendum Websites). Adolescence is a time of great resilience for many youth. During adolescence, many life-long patterns of behavior are established, including health promotion/disease prevention behaviors and care-seeking patterns. Preventable health problems in adolescence can become chronic health conditions in adulthood. Adolescent obesity, low-calcium intake, sexually transmitted diseases, smoking and substance abuse, for example, can all result in serious, long-term health conditions later in life.

The adolescent section addresses issues specifically related to providing comprehensive preventive care to adolescents. The *Maryland Healthy Kids Program Schedule of Preventive Health Care* (Refer to Section 2) summarizes the minimum standards of preventive care for all children and adolescents to 21 years of age. For a more detailed explanation of the standards, refer to Section 3 – pages 1-27. In addition, numerous resources are used to substantiate the clinical information contained in this section (Refer to Section 4 – Addendum Adolescent Bibliography and Websites).

Maryland Minor Consent Law and Confidentiality

An important aspect of adolescent development is the gradual acquisition of independence from parents or guardians. Spending time alone with the adolescent during a portion of the interview is an effective means of giving the adolescent an opportunity to discuss his/her concerns. This allows the provider to assess sensitive issues and provides the opportunity to get to know the adolescent as an individual.

It is also important for the primary care provider to meet with the adolescent and family together to collect a comprehensive medical, family and psychosocial

history. Valuable information can be gathered regarding the family dynamics and relationships. Providers will gain insight about the parent's concerns during the health history. Additionally, the family needs to be a part of the solution to any identified problems, unless the adolescent considers them confidential. However, even confidential services may need to be discussed with parents under certain circumstances.

It is important to establish a sense of confidentiality with the adolescent within the confines of current Maryland law. Under the *Maryland Minor Consent Law*[1] adolescents are permitted to seek confidential services and information for sexually transmitted diseases (STIs), contraception, substance abuse and pregnancy. The adolescent and the parents should be aware that the adolescent may choose to obtain these services without parental consent.

The minor consent law also allows but does not require providers to disclose information about services provided under the minor consent provision. This confidentiality provision helps providers establish and maintain trust with their adolescent patients without necessarily excluding parental involvement. Providers may have personal or professional limits to providing confidential services, and these limits should be discussed with the adolescent and his or her parent(s). For example, providers may elect to notify a parent when the adolescent's health or safety is at risk and the adolescent is not following through with the recommended treatment. Additionally, providers must disclose information regarding suicidal ideation or whether the adolescent is otherwise a danger to self or others.

B. HEALTH AND DEVELOPMENTAL HISTORY

Medical and Family History

For adolescents, the health history is an important means of identifying health problems and risks. Both the medical and family history are important in order to obtain information relevant to health supervision, compile demographic information, and help the primary care provider develop a general understanding of the history, functioning, questions and concerns of the family. An adolescent history, in addition to history of illness, injuries and hospitalizations, includes reproductive and gynecological history and assessments for substance abuse and mental health. The *Medical/Family History Questionnaire* and the *Pediatric Visit Sheets* (Refer to Section 7 – Appendix I) can be utilized to obtain the family and personal health histories. Updating these histories annually will help identify emerging health problems of significance to the adolescent.

On the initial visit with an adolescent the practitioner should establish him/herself as the adolescent's practitioner and focus on encouraging the adolescent to take responsibility for his/her personal health care. This empowers the adolescent to comply with recommendations and take responsibility for their personal progress.

[1] Annotated Code of Maryland-Health General-§20-102

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Adolescents will often present with chief complaints that are unrepresentative of their true concerns. An adolescent presenting with mild acne or pelvic pain may, in actuality, be afraid she is pregnant. An adolescent male with chest pains may be concerned about gynecomastia. Gentle but persistent exploration of the adolescent's concerns is often necessary before the true chief complaint is evident.

Psychosocial History and Developmental Surveillance

Healthy adolescent development is a complex and evolving process that requires supportive and caring families, peers, and communities; access to high quality services (health, education, social and other community services); and opportunities to engage in skill building activities to succeed in the developmental tasks of adolescence. Therefore, a comprehensive psychosocial history is required to determine the impact of the adolescent's environment at home, at school and in the community on his or her physical health, development, and emotional well being.

Significant changes in the adolescent's environment should be documented as part of the psychosocial history. The psychosocial history may include, but is not limited to new hobbies or activities, recent achievements in and out of school, separation or divorce of parents, the recent death of a family member or friend, job loss of a family member, loss of a house or frequent moving, a recent birth in family, adolescent pregnancy, or exposure to violence in the home, school or community.

Adolescents are well past the age when traditional objective developmental tests of younger ages can be used. Therefore, providers need to assess the adolescent's progress toward independence and adulthood as part of developmental surveillance. Assessment of grade level, school performance and/or job performance, extracurricular activities, peer relations and future plans are all components of adolescent developmental surveillance.

In addition, demonstrating a positive attitude toward family and community, and exhibiting a sense of self-confidence and resiliency when confronted with live stressors are important indicators of achieving developmental tasks. When problems are identified, the provider should refer the adolescent for specialty services appropriate to the problem. Referral to school counseling services may be helpful in assisting the adolescent when school related problems are identified.

Providers can use the *HEEADSSS (Home, Education/Employment, Eating, Activities, Drugs, Sexuality, Suicide/Depression, and Safety)* tool to assess the adolescent's psychosocial and developmental status.[2] Using the *HEEADSSS* framework, providers can discuss many sensitive issues that are potential threats to good health such as initiation of drug use. The adolescent can complete this

[2]A Clinical Guide for Pediatricians, *"Adolescent Health Update: Bright Futures for the Busy Clinical Practice"* by Duncan, Paula, MD, FAAP and Pirretti, Amy E., MS, Vol. 22, No. 1, November 2009, p.3,

assessment questionnaire prior to the medical interview, and the provider can use this to trigger a dialog and elicit further information during face-to-face interview.

Mental Health Assessment

During the transition to adulthood, young people experience many emotional challenges that have a significant impact on their character and personality development. Annual preventive health visits are important opportunities to identify early evidence of mental health problems that emerge during this time of growth and change. Similarly, behaviors such as eating disorders or drug/alcohol abuse often begin during adolescence.

It is the responsibility of the primary care provider to conduct a mental health assessment at each adolescent preventive health visit to identify risks associated with behavioral or emotional problems. Providers can use the age-specific *Mental Health Questionnaires* developed by the Maryland Healthy Kids Program, in collaboration with the DHMH Mental Hygiene Administration, to assist with this assessment (Refer to Section 7 – Appendix II).

Note results of the mental health assessment in the adolescent's chart. In some cases, when a mental health problem is identified, the primary care provider can counsel the patient and note this in the chart. However, when specialty mental health services are needed refer the patient directly to the **Maryland Public Mental Health System** by contacting **1-800-888-1965 (consumers and providers).** Access additional mental health information and resources online at: maryland.valueoptions.com/services. Document the referral in the chart.

Depression/Suicide

A National Adolescent Health Information Center review found that the most common mental health disorder among adolescents is depression. Adolescents with unidentified mental health disorders have poorer physical health and engage in more risky behaviors. Both the Institute of Medicine (IOM) and United States Preventive Services Task Force (USPSTF) recommend that physicians in primary care settings screen adolescents for major depressive disorders with its associated potential for suicide. Using a validated screening tool will enhance early identification and treatment of adolescent depression.[3] Primary care providers should also educate families about signs of depression in children and adolescents (Refer to Section 3 – Depression in Children).

One validated screening tool, *TeenScreen in Primary Care* can be used for adolescents 11 – 18 years of age and was developed by Columbia University (Refer to Section 4 – Addendum. The TeenScreen screening tools are brief questionnaires that the teens can complete in the waiting or exam rooms. Primary care providers can use these screening tools to help evaluate whether a

[3] National Institute for Health Care Management (NIHCM) Issue Brief, *"Improving Early Identification & Treatment of Adolescent Depression: Considerations & Strategies for Health Plans"*, February 2010

teen is suffering from depression, anxiety, or other conditions. When identified early, adolescents with mental illness have the best chance to lead healthy lives and reach their full potential. Free mental health checkup questionnaires and resource materials are available from Columbia University. For more information about this screening tool, call 212-265-4426, or go to their website: www.teenscreen.org/.

The American Medical Association's *Guidelines for Adolescent Preventive Services (GAPS)* also recommends annual questioning of adolescents about behaviors or emotions that indicate recurrent or severe depression or risk of suicide. A copy of the GAPS recommendations and an algorithm for suicide and depression can be obtained from the American Medical Association (AMA) website (Refer to Section 4 – Addendum Websites).

Eating Disorders

Concerns about weight related issues may increase during adolescence including over-eating, binging and purging, and excessive dietary restriction. Eating disorders such as anorexia nervosa and bulimia nervosa are chronic illnesses that can lead to long-term medical consequences. Because eating disorders are prevalent in middle childhood and adolescence, it is important for the primary care provider to screen for them. For additional information on eating disorders and how to assess for them, refer to the *Bright Futures* and other websites for details (Refer to Section 4 – Addendum Websites). Once identified, it is important that treatment be initiated. Treatment of adolescents with eating disorders optimally takes place with the support of an interdisciplinary team, including a primary care health professional, a dietitian, a dentist and mental health professional. Contact the adolescent's MCO for assistance with referrals.

Attention Deficit Hyperactive Disorder (ADHD)

ADHD is a disorder characterized by behavior and attention difficulties exhibited in multiple settings. It begins in childhood and is identified by specific attention, hyperactivity and impulsiveness criteria found in the *American Psychiatric Association's Diagnostic and Statistical Manual (DSMIVR).* ADHD is relatively common affecting up to 10% of children/adolescents. However, some adolescents may not be diagnosed and treated early in childhood and are at risk for school failure, substance abuse, and depression.

A clinician with skills and knowledge in the area of mental health, developmental or behavioral pediatrics must perform the ADHD evaluation. The overall approach to diagnosing an adolescent with ADHD involves the following:

- A comprehensive interview with the adolescent's parent or guardian
- A mental status examination of the adolescent
- A medical evaluation for general health and neurological status
- A cognitive assessment of ability and achievement

- Use of ADHD-focused parent and teacher rating scales
- School reports and other adjunctive evaluations separate from the school reports such as speech, language assessment, etc.

An adolescent diagnosed with ADHD without any accompanying emotional disorders can receive care from a primary care provider for management of medications. Medication is one component in the treatment of ADHD and does not appear to increase the likelihood of future cigarette smoking or substance abuse. Additionally, adjunctive services may improve an adolescent's outcome. Teaching and reinforcing organizational skills and social skills are interventions that can significantly improve outcomes. In addition, on going contact and follow-up with the parents of an adolescent with ADHD who is on medication is a critical component of the medication management.

ADHD is classified as a mental health disorder**,** possibly requiring multiple therapeutic approaches. A number of psychiatric conditions frequently occur with ADHD, i.e. mood disorder, conduct disorder, oppositional defiant disorder and bipolar disorder. If the adolescent's behavior changes significantly, re-evaluation is necessary through a mental health referral by calling **1-800-888-1965** (consumers and providers)**.** Access additional mental health information and resources online at: maryland.valueoptions.com/services.

Violence

Primary care providers are often the first health professionals to become aware of violence in the adolescent's family, school and/or community. A violence risk assessment is recommended annually using questions concerning violence, access to guns, and potential violence in personal relationships (sexual assault, partner violence). Advise parents and guardians to avoid the use of physical punishment as a means of resolving conflicts with children and adolescents.

Bullying and Cyber-bullying

Bullying including cyber-bullying is of increasing concern in the pediatric population. Health care providers should:

- Ask children and adolescents about their experiences, if any, regarding bullying and cyber bullying
- Provide information in their offices for families to educate them on this topic
- Encouraged children and adolescents to "report" if they are victims so that appropriate referrals can be initiated
- Encouraged parents to work with schools to promote awareness, prevention, and appropriate intervention

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Physical and Sexual Abuse

In addition to the signs of physical abuse, noted in Section III, be alert for signs of possible sexual abuse in both males and females and, when indicated, screen for sexually transmitted diseases. Possible signs of sexual abuse may include the following:

Direct Evidence

- Injury
- Infections including sexually transmitted infections
- Pregnancy

Indirect Evidence

- Behavior disorders
- Running away
- Substance use
- Physical complaints
- Depression/suicidal behavior
- Promiscuity

Maryland law mandates that primary care providers report any suspected abuse or neglect to the local Department of Social Services (Refer to Section 8 – Telephone Directories) or the police. Providers are to identify the potential conditions for abuse (Refer to Section 3 – Child Abuse Assessment) and make appropriate referrals for assistance.

A minor may disclose violent or sexually exploitive behavior such as dating violence, sexual assault or sexual activity with a partner who is significantly older and is neither a family or household member, nor an individual with any past or present responsibility for the care or supervision of that minor. When this occurs, the client should be advised that the provider and/or staff are there to help any adolescent who requests assistance. The adolescent may need support in seeking the involvement of a parent or family member and/or in accessing community resources, including law enforcement or emergency medical facilities and shelters.

Substance Abuse Assessment for Drugs and Alcohol

Because of the increased number of young adolescents and young adults using drugs and alcohol in our society, primary care providers are in a unique position to identify substance abuse during routine office visits and offer appropriate treatment. The Maryland Healthy Kids Program requires that any provider seeing Medicaid children perform yearly assessment for substance abuse beginning at 12 to 13 years of age and recommends assessment at earlier ages when the provider suspects problems.

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Use of a standardized tool for screening for substance abuse is strongly recommended. The *CRAFFT (Car, Relax, Alone, Forget, Friends, Trouble)* is a brief, validated, adolescent substance abuse screening tool (Refer to Section 7 – Appendix II). Both physicians and general clinicians may administer the tool. It is recommended that the screen be administered verbally. The *CRAFFT* can be easily memorized and was designed specifically for use with adolescents. The *CRAFFT* can assist primary care providers determine which adolescent patients are appropriate for brief office interventions and those that need prompt referral to substance abuse specialists.

One positive answer indicates further assessment of quantity and frequency of substance use is needed. If an incident happened only once, three years ago, then it may not be cause for great concern. However, if the substance abuse occurred several times during the past year, then the situation warrants additional follow-up.

Two or more "yes" answers on the *CRAFFT* indicate that the adolescent is at risk for substance abuse, requiring further assessment, counseling, and/or referral that should be documented in the adolescent's chart. When an adolescent is enrolled in a Managed Care Organization, referral for substance abuse problems is based on protocols established by the MCO. The primary care provider should contact the adolescent's MCO for identified substance abuse problems. To make a MCO referral, see the *MCO Contact Information for Substance Abuse Providers* (Refer to Section 4 – Addendum).

Common Indicators of Adolescent Drug and Alcohol Abuse *

- Changes in school attendance and grades
- Unusual flare-ups or outbreaks of temper
- Poor physical appearance (often becomes slovenly)
- Furtive behavior regarding drugs (especially when in possession)
- Wearing of sunglasses at inappropriate times to hide dilated or constructed pupils
- Long-sleeved shirts worn consistently to hide needle marks (if injecting drugs)
- Association with known drug abusers
- Borrowing money from students to purchase drugs
- Stealing small items from school or home
- Hiding in odd places; i.e., closets, storage area, to take drugs
- Attempting to appear inconspicuous in manner and appearance to mask usage

- Withdrawal from responsibility
- Change in overall attitude – depression, low self-esteem, poor social skills, school problems

***** *Note that some of these changes may occur in normal adolescents or result from other problems.*

A "diagnostic" referral for addiction treatment will either rule out a problem or identify the problem at an early stage before the adolescent reaches the disease stage of alcohol or substance abuse. Treatment is much more likely to succeed when the problem is identified at an early stage.

Tobacco

Tobacco use continues to be a health care concern among children and adolescents. Therefore, providers who see adolescents should screen adolescents for tobacco use, offer smoking cessation advice and interventions to both adolescents and parents, and teach the importance of decreasing exposure to second hand smoke.

C. COMPREHENSIVE PHYSICAL EXAMINATION

As with younger children, a complete physical examination that includes a minimum of five systems is required each year for all adolescents (Refer to Section 3 – Unclothed Physical Examination by Systems). Additionally, the physical examination provides an excellent opportunity to educate the adolescent about his or her changing body. For example, the adolescent female may be taught to perform routine breast examinations, or the young adolescent male may be reassured about genital development. The adolescent may also raise concerns not mentioned during the initial interview. The true chief complaint may, in fact, be revealed during the physical examination.

The American College of Obstetricians and Gynecologists (ACOG) now recommends that a woman should have her first cervical cancer screening (Pap smear) at 21 years of age, no matter when she became sexually active.[4] ACOG's new recommendations state that even though the rate of HPV infection is high among sexually active adolescents, invasive cervical cancer is very rare in women under 21 years of age.

A provider may still wish to refer a sexually active adolescent for reproductive health services including contraception. The adolescent should be given the name of the provider and a referral for services. Coordination of such services remains the responsibility of the primary care provider.

[4] The American College of Obstetricians and Gynecologists: *Obstetrics & Gynecology* Practice Bulletin #109, "Cervical Cytology Screening," December 2009

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Vision and Hearing Assessments

At least a gross assessment of hearing and vision is required as part of every adolescent preventive care visit but objective testing is encouraged. Document results of a gross assessment based on provider observation and questioning of the adolescent's ability to see and hear. Objective vision and hearing results from the school can be documented in the chart as a sufficient assessment (Refer to Section 3 – Vision and Hearing Assessments and Table #4).

Blood Pressure Measurements

The Maryland Healthy Kids Program requires assessment of blood pressure on the yearly adolescent visit with documentation in the chart according to recommended standards (Refer to Section 3 – Blood Pressure Measurements and Tables #1-3).

Height, Weight, and BMI Measurements

Early adolescence is a time of considerable change in body stature. Plotting weight and height for age allows comparison with all adolescents the same age and is the best initial indicator of growth problems. The use of Body Mass Index (BMI) is required to monitor changes in body weight and to consistently assess risk of underweight and obesity in children and adolescents from 2 to 20 years of age. Calculate BMI using the English or metric formula, or by referring to a BMI chart or wheel (Refer to Section 7 – Appendix I). Once BMI is calculated, plot the result on gender specific BMI-for-age growth charts, available from the CDC, to determine the BMI-for-age and gender percentile. It is important to review and interpret the results of the automatic BMI calculations provided by electronic medical records (EMR) or electronic health records (EHR) used in many practices today. Provider interpretation of results is paramount in identifying overweight and obese children and those at risk for obesity related complications.

How to Calculate Body Mass Index (BMI)

English Formula: **BMI = weight (lb) ÷ height (in) ÷ height (in) x 703**

Metric Formula: **BMI = weight (kg) ÷ height (cm) ÷ height (cm) x 10,000**

What do BMI-for-age and gender percentiles mean?

$\geq 99^{th}$ percentile……"Morbid" Obesity

95^{th} to 98^{th} percentile…… Obesity

85^{th} to 94^{th} percentile…… Overweight

5^{th} to 84^{th} percentile…….. Healthy weight

$<5^{th}$ percentile…… Underweight

BMI-for-age and gender is an effective screening tool, but it is not a diagnostic tool. Children who fall into the following categories need further assessment. If

BMI is below fifth percentile, assess for acute or chronic illnesses that can lead to underweight. If BMI is between 85th and 94th percentiles, child is overweight and needs further screening. If BMI is at or above 95th percentile for age and sex, child is obese and needs in-depth medical and dietary assessment according to current guidelines (Refer to Section 7 – Appendix I).

Nutritional Assessment

As children enter adolescence, many of them become more independent with respect to food choices and food preparation. Adolescents spend less time at home; therefore, they eat more commercially prepared foods ("fast food"). Some adolescents will restrict their intake; still others will consume excessive amounts of food. As a result, many young people are at risk for health problems related to poor eating patterns such as eating disorders and obesity.

Ask questions regarding current dietary habits when taking the medical history. During the physical examination, take time to measure the patient's weight in an examination gown to standardize the measurements. Track height, weight and Body Mass Index (BMI) longitudinally, in order to monitor trends over time. This is essential for the early identification of eating disorders and obesity.

During the nutritional assessment, the provider should ask open-ended questions that permit the adolescent and the parents to describe their current behaviors, their level of physical activity, and their attitudes about their weight and body appearance. Use the nutrition questionnaire (Refer to Section 7 – Appendix II) as an opportunity to identify adolescents at risk for eating disorders and intervene early to prevent their onset.

Obesity in Adolescence

Obesity is a pressing national health concern. Most children and adolescents who are overweight are at risk for becoming obese adults. Adolescence is a critical time to prevent the development of excess weight and reverse unhealthy weight gain. Work with adolescents to establish healthy behaviors, and undo or prevent negative behaviors before they become established. Adolescents with a genetic predisposition to gain weight are more likely to become overweight if they are sedentary and consumers of high-fat, high-calorie diets. Although some adolescents exercise, many do not. Obesity affects both the physical and mental health of the adolescent. Every overweight adolescent should have a thorough history and physical examination to rule out the less common causes of obesity. Simple nutritional recommendations from the primary care physician may be helpful or a nutritional consultation may be necessary. Contact the adolescent's MCO to refer to a licensed dietician or nutritionist within the MCO specialty network.

Medical Management of Overweight and Obesity in Adolescents

The 2007 recommendations by the Expert Committee on the Assessment, Prevention, and Treatment of Child and Adolescent Overweight and Obesity

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(Refer to Section 3, Addendum) provides guidance on management of weight in all children. Primary care physicians are urged implement Step 1, Obesity Prevention, at Well Care Visits at least once a year. Obesity prevention includes the following:

- Assess key dietary habits (e.g. consumption of sweetened beverages)
- Assess physical activity habits
- Assess readiness to change lifestyle habits
- Conduct a focused family history of obesity and obesity-related illnesses

Laboratory testing recommendations depend on the degree of obesity and associated risk factors as follows:

- Adolescents with a body mass index between the 85th and 94th percentiles but who have no obesity-related risk factors should receive a fasting lipid profile blood test
- Adolescents 10 years of age or older who have a body mass index between the 85th and 94th percentiles with obesity-related risk factors should have additional testing for liver function (ALT and AST) and fasting blood glucose
- Adolescents 10 years of age or older with a BMI above the 95th percentile should also have measurement of blood urea nitrogen and creatinine levels

A four-stage approach to treatment of childhood obesity is recommended and includes advising parents and adolescents to:

- Limit consumption of sweetened beverages and fast food
- Limit the amount of screen time (TV and Computers) per day
- Increase physical activity for at least 60 minutes per day
- Eat family meals on most, and preferably all, days of the week

Additional information on these recommendations can be found at:

- www.ama-assn.org
- www.pediatrics.org/cgi/content

Or e-mail questions to: www.obesity@nichq.org

Type 2 Diabetes Mellitus

Another emerging health issue is the growing number of adolescents and preadolescents with Type 2 Diabetes Mellitus (T2DM). As the prevalence of obesity increases so does the incidence and prevalence of T2DM. Most adolescents with T2DM have a BMI over the 85th percentile. Many adolescents with T2DM may present with asymptomatic hyperglycemia or glycosuria.

Adolescents with T2DM are usually diagnosed in middle to late adolescence. Overweight adolescents who do not develop diabetes in adolescence may develop it later as adults.

The American Diabetes Association (Refer to Section 4 – Addendum Websites) recommends a fasting glucose test every two years for children starting at 10 years of age who have two of the following risk factors:

- Are overweight (BMI > 85th percentile for age and sex)
- Have a family history of T2DM in first and second degree relatives, or
- Belong to certain ethnic groups (American Indians, African-Americans, Hispanic Americans, Asian/South Pacific Islanders)

D. LABORATORY TESTS

Health Risk Assessments

Age-appropriate health risk assessments are a required element of the laboratory component for the adolescent population and include assessment for risk of tuberculosis, elevated cholesterol and heart disease, STIs and HIV. When risk factors are identified, document counseling and referral for testing in the chart. If the test results are abnormal, document appropriate follow-up: counseling, further testing and/or referral to a specialist.

Tuberculosis Risk Assessment

Because the incidence of tuberculosis (TB) in Maryland has declined, the Maryland Healthy Kids Program requires an annual risk assessment by questionnaire instead of routine skin testing. The *Preventive Screen Questionnaire* (Refer to Section 7 – Appendix II) may be used to assess risk for TB on every adolescent preventive care visit. Routine skin testing is not required and should be conducted only when a risk of exposure is determined by questionnaire (Refer to Section 3 – Tuberculosis Risk Assessment and Table #12 & #13).

Heart Disease/Cholesterol Risk Assessment

With the increasing concern of over-weight and obesity in adolescents, assessment by questionnaire for potential heart disease is warranted. The Healthy Kids Program requires assessment for risk of heart disease and hypercholesterolemia at every adolescent preventive care visit. The *Preventive Screen Questionnaire* (Refer to Section 7 – Appendix II) is available to assist in performing this risk assessment. Document results of the screen, and if positive, obtain a baseline blood cholesterol level. Appropriate follow-up of elevated blood cholesterol levels includes further testing, counseling and/or referral for specialty services when indicated (Refer to Section 3 – Cholesterol/Heart Disease Risk Assessment and Tables #10 & #11).

Of special note is that the National Cholesterol Education Program also recommends a fasting lipoprotein profile once every 5 years for all adults beginning at 20 years of age. Because the Maryland Healthy Kids Program includes young adults, 20 to 21 years of age, a fasting lipoprotein profile is recommended for this age group.

STI/HIV Risk Assessment

The Maryland Healthy Kids Program currently requires that primary care providers conduct risk assessments for Sexually Transmitted Infections and Human Immunodeficiency Virus (STI/HIV) at each preventive health care visit beginning at 12 years of age, or younger if the adolescent is sexually active. The *Preventive Screen Questionnaire* (Refer to Section 7 – Appendix II) is available to assist with this assessment. Document results of the assessment in the chart. Primary care providers may refer their female patients to a gynecologist but are still required to obtain a STI/HIV risk assessment.

The U.S. Preventive Services Task Force recommends that primary care providers counsel adolescents regarding measures to prevent STIs based on the risk factors, needs, and intellectual abilities of each patient. Primary care providers should also communicate effectively with patients regarding healthy sexual behaviors and risks of STIs during the annual preventive health care visit and any other clinical encounter.

Among women, adolescent females 15 to 24 years of age are at highest risk for most bacterial and viral STIs. Other adolescents at high risk for STIs include male homosexuals and bisexuals, adolescents with multiple sexual partners in the last three months, and adolescents with a history of drug and/or alcohol abuse. All sexually active adolescents should be counseled and tested for all STIs/HIV or referred for testing as a routine part of preventive care.

Counseling of adolescents regarding HIV prevention includes an assessment of sexual and drug-using behaviors associated with high risk of HIV infection. Both ulcerative STIs such as chancroid, syphilis and genital herpes, and inflammatory STIs such as gonorrhea, chlamydia infection and trichomoniasis, increase the risk of HIV infection. Early detection and treatment of STIs can have a major impact on sexual transmission of HIV.

STI and HIV Risk Reduction Messages for Sexually Active Adolescents

- Abstinence
- Mutually monogamous relationship with an uninfected partner
  - Caution: adolescents may consider a short-term monogamous relationship to be safe – regardless of the number of relationships encountered within the year
  - Explain that serial monogamy can be very dangerous
- Reduce the number of sexual partners

- Adolescents can't tell who has the HIV virus
- A negative HIV screen may not be an accurate reflection of the HIV status

- Consistent use of protective barriers during sex
  - Latex condoms with water-based lubricant (oil-containing lubricants weaken condoms)
  - Use of lubricants/spermicidals containing nonoxynol-9

STI and HIV Risk Reduction Messages for Drug-Using Adolescents

- Abstinence
- Enter a drug treatment program
- Avoid sharing any drug-injecting paraphernalia
  - Disinfect needles and syringes using household bleach:
  - Draw bleach into syringe and expel (twice)
  - Draw clean water into syringe and expel (twice)
- Beware of injection "works" sold as clean on the streets
- Use protective barriers (latex condoms) during sex

HIV Testing

CDC currently recommends routine HIV testing for all adults and adolescents 13-64 years of age in all healthcare settings. The objectives of the recommendations are to:

- Increase HIV testing of patients, including pregnant women, in health-care settings
- Foster earlier detection of HIV infection
- Identify and counsel persons with unrecognized HIV infection and link them to clinical and prevention services
- Reduce sexual and perinatal transmission of HIV in the US

Opt-Out HIV Testing Recommendations

Opt-out testing means performing an HIV test after notifying the patient

- The test will be performed, and
- The patient may elect to decline or defer testing

No one should ever be tested for HIV without their knowledge. HIV testing is recommended for patients in all health-care settings after the patient is notified that testing will be performed unless the patient declines.

There are many reasons a patient may decline an HIV test, including lack of perceived risk, fear of the disease, concerns about partner violence, potential stigma, concerns about the cost of treatment and/or discrimination. Providers should discuss and address reasons for declining an HIV test. If the patient still opts out, then he or she can be encouraged to be tested at a subsequent visit. The patient's decision should be respected and documented in his or her medical file.

Practice settings that have opt-out testing policies for pregnant women and for recipients of STI services have higher HIV testing rates than those that use opt-in policies (where the patient is given the opportunity to choose the HIV test) or those that require specific counseling for testing. Patients prefer when the testing is routine and offered to everyone rather than feeling singled out for testing because they are perceived to be "at-risk." For these reasons, CDC believes an opt-out approach provides the best opportunity for more people to know. These recommendations were published in the September 22, 2006 issue of the *Morbidity and Mortality Weekly Report*, and may be found at www.cdc.gov/mmwr/preview/mmwr.

Maryland law requires a health care provider to inform a person that an HIV test will be administered and that the person may decline the test without penalty. If the test is administered in a health care facility, informed consent to the test must be obtained and documented in the medical record. *However, a written, signed consent to specifically perform an HIV test is not required.* If the HIV test is *ordered* at a location that is not a health care facility, informed consent must be in writing and signed by the individual on an informed consent for HIV testing document that is approved by the Department. In addition, an HIV test must not be administered unless pre-test counseling is provided[5]. For additional guidance and to request HIV/AIDS prevention materials (Refer to Section 7 – Appendix IV), contact the **AIDS Administration at 410-767-1255.**

Anemia Testing

Healthy adolescents are generally at low risk for iron deficiency anemia. Those who have an underlying disease associated with blood loss, or those who have used restrictive diets that are low in iron, should be screened annually for anemia. It is also recommended that healthy menstruating adolescent females have yearly anemia screens, especially those with menorrhagia or menometrorrhagia. The American Academy of Pediatrics recommends that adolescent males receive a test for anemia during their peak growth period. A hemoglobin or hematocrit is sufficient to screen adolescents for anemia.

Hemoglobinopathy Testing

Review sickle cell trait results at 12 years of age if a negative sickle cell trait result is not documented in the child's chart, and the child/adolescent was born in Maryland contact the **DHMH Maryland State Newborn and Childhood**

[5] Health-General Article 18-336

Screening Laboratory at 410-767-6099 for assistance in determining the results. If results are not available or the child was not born in Maryland, a hemoglobin electrophoresis is recommended, regardless of apparent racial or ethnic group. Refer the adolescent for genetic counseling if sickle cell trait is present.

E. IMMUNIZATIONS

The immunization history is an important component of the adolescent's medical history. Most adolescents are unaware of the immunizations they have received in childhood, and their records may be incomplete. Immunization registries are useful, accurate sources of immunization information and records. Maryland has a registry known as ImmuNet that is an internet-based system that receives and stores childhood and adult immunizations. Providers may enroll free of cost. To obtain more information, contact an **Immunet** representative at **410-767-6606**.

The Baltimore City Immunization Registry Program is a vaccine registry that may assist the primary care provider in obtaining the adolescent's immunization record when the immunization history offered by the adolescent or the parents is incomplete. If the adolescent attends a Baltimore City Public School contact the **Baltimore Immunization Registry Program at 410-545-3048**.

Another source of immunization records for adolescents that formerly lived in the District of Columbia is the **Washington DC Immunization Registry**. Providers can access the registry by calling **202-576-9301**.

Adolescents and young adults who have not received adequate immunizations are at significant risk for developing serious infections. Thus, the immunization history should be a priority for all adolescents at their initial preventive health care visit. Make every effort to gather all available medical information to determine whether additional immunizations are necessary. Positive titers for measles, mumps, rubella, varicella and polio can substitute for vaccination. Assess adolescents for the following vaccines:

- **Measles, Mumps, and Rubella (MMR)*** – A two-dose vaccination schedule is recommended for students from primary school through college age. All Maryland students are required to show proof of two doses of measles, one dose of mumps, and one dose of rubella vaccines, or blood tests showing immunity.
- **Varicella***– Varicella virus vaccine should be administered to adolescents if they have not been vaccinated with two doses of the vaccine and do not have a reliable history of chicken pox. If the adolescent did not have the infection in childhood, they remain at risk for this infection. Adolescents who did not receive any previous Varicella vaccine must have two doses of varicella vaccine, at least one to two months apart. Adolescents who received only one prior dose of Varicella during childhood should receive another dose as an adolescent.

- **Tetanus, Diphtheria and Pertusis Toxoids (Tdap)*** – Td boosters have long been recommended for long-lasting immunity against tetanus. Now a booster dose of Pertusis is also recommended for adolescents. Therefore, one dose of Tdap should be administered at 11-12 years of age and older, and a routine Td booster is recommended every five to ten years thereafter.
- **Hepatitis B*** – The Advisory Committee on Immunization Practice (ACIP) recommends that hepatitis B vaccine be given to all adolescents who have not been previously vaccinated. Hepatitis B may be transmitted by sexual contact and therefore all adolescents should be immunized against this infection. Assess every adolescent for the complete hepatitis B series. Adolescents, 11 to 15 years of age, may receive two doses of adult vaccine (Merck Recombivax HB only) with the 2nd dose administered 4-6 months after the first.
- **Hepatitis A***– Immunize at risk adolescents with the hepatitis A vaccine, particularly if they live in areas where the average annual rate of hepatitis A infection is between 10 and 20 cases per 1000,000. This vaccine requires two doses, given at least six months apart.
- **Influenza*** – Influenza vaccine is recommended annually for <u>all</u> adolescents to18 years of age and those 18 through 20 years of age with high-risk conditions (chronic pulmonary, cardiovascular and/or metabolic disease, renal dysfunction, hemoglobinopathies, or conditions associated with immunosuppression, including HIV infection).
- **Meningococcal conjugate vaccine*** – Meningococcal conjugate vaccine is recommended for all adolescents at 11-12 years of age. Maryland law requires that individuals in Maryland institutions of higher education, residing in on-campus housing, be vaccinated against meningococcal disease, or sign a waiver.
- **Pneumococcal Polysaccharide Vaccine** – Pneumococcal Polysaccharide vaccine is recommended for adolescents who have anatomic or functional asplenia (including sickle cell disease, nephrotic syndrome, cerebrospinal fluid leaks, or conditions associated with immunosuppression including HIV).
- **Human Papillomavirus (HPV)*** - Either the Cervarix or Guardasil HPV vaccine is routinely recommended for adolescent and young adult females, with the first of 3 doses at 11-12 years of age to prevent infection with specific HPV virus strains that are sexually transmitted and known to increase risk of cervical cancer. Guardasil also prevents two strains of HPV responsible for causing genital warts in women and penil and ano-rectal warts in men. The second dose should be administered at least 2 months after the first and the third is given at least 6 months after the first dose. Vaccinate older adolescents who did not complete the series earlier. Adolescent males may be vaccinated with the Guardasil series upon parental request.

** Vaccines available from the VFC Program through age 18 years.*

The Vaccines for Children (VFC) Program

It is very important to note that adolescents, younger than 19 years of age, are eligible to receive free vaccines from this program. Healthy Kids providers serving adolescents, less than 19 years of age, are required to enroll in the Maryland Vaccines for Children (VFC) Program (Refer to Section 3 –The Vaccines for Children Program). Call the **VFC Program at 410-767-6679** or the local VFC Consultant to enroll (Refer to Section 8 – Telephone Directories).

Note: For vaccines administered to MA recipients 19 through 20 years, bill the adolescent's MCO (or straight MA if the adolescent is in Fee-For-Service) (Refer to Section 6 – Billing and Encounter Data Reporting).

F. HEALTH EDUCATION AND ANTICIPATORY GUIDANCE

Provide health education and anticipatory guidance at each preventive visit and document in the patient record. The education should focus on both the parents and adolescents and should be integrated throughout the encounter. Anticipatory guidance for the parents or guardians is essential, given the many rapid changes of adolescence. It may be an opportunity for parents to voice their concerns about the adolescent's emotional or physical well-being. It provides a vehicle for parents to establish a relationship with the provider, and it may improve their parenting skills. Parents frequently have additional questions, and providers will need to reinforce their health guidance and clarify their instructions. The adolescent patient should also participate in this experience, so that he/she clearly accepts the responsibility for good health outcomes.

Present health education and anticipatory guidance in a manner that will:

- Assist the family in understanding what to expect in terms of the adolescent's development
- Provide information about the benefits of healthy lifestyles and practices
- Promote the prevention of diseases and injuries
- Provide support to adolescents, as they become responsible for their health and lifestyle choices

Although the adolescent spends less time under the direct supervision of the parent, adults should be reminded of the need to stay involved with their teenagers. Effective parenting requires adults to set limits for their children and to provide a nurturing and supportive environment that promotes healthy lifestyles. The provider needs to remind parents about successful strategies to improve the health status of their child. Open lines of communication are necessary if these goals are to be achieved. Intentional and unintentional injuries are the principal causes of morbidity and mortality in adolescents. It is essential to evaluate the extent to which adolescents have experienced injuries. Additionally, the provider needs to determine what measures have been taken to reduce injury.

Section 4 Adolescent Preventive Health

Age-specific information is included on each of the *Healthy Kids Pediatric Visit Sheets* (Refer to Section 7 – Appendix I). The focus of adolescent health education and anticipatory guidance should be on the adolescent's increasing responsibility in decision-making (Refer to Section 3 – Age-Specific Health Education).

Adolescent Sexuality/Reproductive Health

Assess what the adolescent knows about the reproductive process. Adolescents will have a broad range of understanding regarding pubertal development and the reproductive process. Discussions of these issues should be structured to meet the needs of the patient, and they may need to be simplified for the young adolescent patient. Provide guidance based on the level of maturity and sexual activity of the individual, not on chronological age. Puberty for girls may begin as early as 8 years of age. Menstruation begins between 10 and 14 years of age. In boys, puberty usually begins about two years later than in girls. Address the risks of pregnancy and sexually transmitted diseases, including HIV, with both females and males.

Adolescents should also be given the message that force and coercion have no place in sexual relationships and may be illegal. Informational materials and referrals to community resources, including law enforcement, that deal with domestic and sexual violence should be readily available. Information is available from the following resources:

- Maryland Network Against Domestic Violence (MNADV)
  - www.mnadv.org/
  - 1-800-MDHELPS
- Maryland Coalition Against Sexual Assault (MCASA)
  - www.mcasa.org/
  - 410-974-4507
- National Sexual Assault Hotline – 1-800-656-HOPE

Contraceptive Options

In order for the adolescent to consent to any contraception method explain the benefits and/or risks of each method. In general, adolescents initiate sexual intercourse using no contraception, progress to methods available from pharmacies, and finally, use methods prescribed by a physician. Advise specifically against the use of withdrawal and douching as methods of contraception. Similarly, discourage unprotected extra-genital sex.

Methods of contraception currently available to adolescents:

- **Abstinence –** This is the preferred contraceptive method for use by adolescents. Support and encourage them in this decision, as it is the most effective way to prevent pregnancy, STIs and HIV.

- **Condoms –** This is the most effective contraceptive method for the prevention of STIs. Instruct all sexually active adolescents in the use of condoms. Pharmacies will dispense condoms free of charge to any individual with a valid Red and White MA card.
- **Oral contraceptives, contraceptive patch –** These products are available by prescription, and they are highly effective methods. Patients who have no medical contraindications to using these hormonal methods may get a prescription for the form of hormonal contraception that they would most like to use.
- **Depo-Provera –**This is an injectable, progestin-only contraceptive. It is effective for 13 weeks and well tolerated by most women who have no contraindications to its use. It is a favored method used by women who wish to defer child bearing for an extended period of time.
- **Emergency contraception –** This method is used after having unprotected intercourse. It is an important contraceptive method that must be used within 72 hours after the coital event. Adolescents may elect to use this method following sexual assault, or after contraceptive failure (e.g., when the condom breaks). Over-the-counter (OTC) use was approved in August 2006. OTC sales are restricted to individuals age 17 and older. Individuals age 16 and younger must have a valid prescription. For additional assistance, contact the **Emergency Contraception Hotline at 1-800-584-9911**, the LHD Family Planning Clinic, or refer the patient to the gynecologist for immediate attention.
- **Diaphragms, cervical caps, rings –**These methods are effective if used properly and consistently. They require the adolescent to insert the device into the vagina, and they require additional use of contraceptive gel or cream.
- **Intrauterine Device (IUD) –** These devices are rarely offered to adolescents. If the primary care provider believes that this method is an option for a young patient, the patient should be referred to a gynecologist for consultation.

Dental Care

For children and adolescents the dental administrator for the dental Medicaid "Maryland Healthy Smiles" Program, DentaQuest, will assist in locating appropriate dental care within reasonable distance from the enrollees' residence to ensure adequate access to oral health care services. Providers may contact the **Division of Dental, Clinics and Laboratory Services at 410-767-5706** to assist children not enrolled in the Maryland Healthy Smiles Program and request the *Oral Resource List Booklet*. Parents or caregivers can self-refer to a dentist, without a referral from the primary care provider (PCP).

Provide oral health education, counseling and disease prevention information. Emphasize the need to make and keep dental appointments, stressing self-responsibility, at each visit to parents or caregivers and adolescents.

Section 4 Adolescent Preventive Health

Scheduling the Return Preventive Care Visit

Educate the adolescent and the family regarding the need to have annual preventive care visits. Document this education and the next scheduled preventive visit in the chart. Opportunities to conduct a preventive care visit occur when the adolescent presents for an initial visit, a school or sports physical or an employment physical. If the last preventive visit was more than a year ago, and the adolescent presents for a “sick” or problem oriented visit, make every effort to conduct a preventive care visit.